

### **ABSTRACT OF DISCLOSURE**

A communication system capable of improving a TCP transmission efficiency includes a transmitter for transmitting data packets; a receiver connected to the transmitter, and for receiving the data packets and transmitting to the transmitter response signals with respect to the received data packets; and a multiplexer for multiplexing and transmitting to the transmitter the response signals transmitted from the receiver, and transmitting the transmitted data packets from the transmitter to a corresponding receiver, the multiplexer provided with a queue status monitor for monitoring queue statuses of the transmitted data packets and/or response signals, and a congestion control adjuster instructing the receiver to hold or compress the response signals based on the monitored queue status. Accordingly, the communication system can carry out efficient TCP congestion control by reducing a load of the TCP congestion control of the transmitters and receivers.